

# **Ajanda**

As Biotrend, we work for the well-being and welfare of our planet. More than a waste management company, we grow by extending the goodness that our planet deserves into new long-term values.

Across our activities, we contribute to the biocircular economy and support the economic development and progress of our country.

Deploying the best technologies available, we transform municipal and agricultural wastes and forestry residues into circular raw materials, sustainable fuels, and renewable energy, and bring them into the future.









1. Company Overview

**2.** Financial Overview

**3.** Q&A

4.
Annex





#### **Presenters**



Osman Nuri Vardı Vice Chairman of the Board of Directors & CEO

#### 20 years of work experience

- 2017 Biotrend Energy, Founder and Vice Chairman of the Board of Directors
- 2011 Karya Power Systems Energy & Engineering, Founder
- 2003-2011 Government Several roles
- 2001-2003 Böhler Control Engineering
- 2000-2001 Doğu Akdeniz University Academician

Doğu Akdeniz University, Electrical and Electronic Engineering



Burak Polat CFO, ACCA, SMMM

#### 17 years of work experience

- 2022-2023 Doğanlar Mobilya Group-CFO
- 2019-2022 Digiturk-Finance Director
- 2016-2019 Turkcell-Finance Manager
- 2013-2016 Isystems Industries-Financial Control Director
- 2009-2012 Rönesans İnşaat-Financial Control Manager
- 2006-2009 Finansbank A.Ş.-Assistant Inspector

Bilgi University, MSc Accounting and Auditing

Boğaziçi University, B.A. İn Business Administration



**Gözde Çivici**Investor Relations
Director and Secretary
General

#### 17 years of work experience

- 2020-2021 TSKB Corporate Finance Senior Manager
- 2017-2020 Akbank Project Finance Manager
- 2011-2017 Ak Yatırım –Corporate Finance Manager
- 2010-2011 KPMG –Financial Consultancy Senior Associate
- 2007-2010 İş Yatırım- Corporate Finance Associate
- 2006-2007 American Express, Washington DC Analyst

Boğaziçi University, M.A. İn Economics and Finance Emory University, B.A. İn Economics







1. Company Overview

### **Developments in 2022**



Significant progress in capacity increase of facilities

Within the scope of continuous improvement activities, Biotrend achieved significant installed capacity increases by realizing improvements at the Uşak, Bergama, and İnegöl Integrated Solid Waste Management Facilities in 2022. These activities in the three facilities resulted in an increase of total installed capacity to 99.2 MWe.



Upcycling Facility Investment in collaboration with Honeywell

Biotrend, established the "Biotrend İleri Dönüşüm ve Yenilenebilir Enerji Teknolojileri Sanayi Anonim Şirketi" to conduct activities for the recovery of plastic waste with upcycling technologies and to carry out the installation of renewable energy power plants for domestic consumption.



Carbon Credit Contract signed with Mundo Verde

In October, a contract was signed with Switzerland based Mundo Verde to receive consultancy services for the Company's carbon asset certification processes under VERRA and ICR standards, including consultancy services on VERRA and ICR projects and the sale of 5 million tons of carbon credits of VERRA projects.



#### **Application to EMRA for Electricity Storage**

Doğanlar Yatırım Holding A.Ş., the Company's controlling shareholder, took over its subsidiary Doğan Kent Elektrik Enerjisi Toptan Satış Anonim Şirketi and applied to the Energy Market Regulatory Authority on October 26, 2022 for the Project of Six Independent Electricity Storage Facilities, designed to have an installed capacity of 50 MWe each (300 MWe in total) in addition to electricity trading activities carried out by Doğan Kent.





### **Developments in 2022**



Issuance of a Sustainable Lease Certificate

Per the decision of the Company's Board of Directors dated October 31, 2022, an application was submitted to the CMB for the issuance of a Sustainable Lease Certificate with a TL 500 million issue ceiling amount by the issuer Kalkınma Yatırım Varlık Kiralama A.Ş., in which the Company will take place as the fund user/originator, with private placement without public offering and/ or through sales to qualified investors.



The ratio of women on the Board of Directors reached 33% and Biotrend became a signatory to the United Nations Women's Empowerment Principles.

In line with its "Biotrend Social Inclusiveness and Gender Equality Action Plan", the Company became a signatory to the United Nations Women's Empowerment Principles.

Commencing transformation from the Board, the number of independent female Board members was raised to three, bringing the ratio of women on the Board to 33%.



The only Turkish company included in the United Nations Industrial Development Organization (UNIDO) Report

The Company's plant in Aydın Çine, which generates bioelectricity from agricultural and forestry wastes, was chosen as a pilot plant, the only Turkish company featured in the UNIDO Report.



A Sustainability Office was established, and Biotrend was selected to the Climate Finance Accelerator Program.

Biotrend established a Sustainability Office in April 2022 to strengthen its communication with all stakeholders and improve the Company's environmental, social and governance sustainability performance. With the aim of performing the optimal waste, water, energy and resource management for environmental sustainability management.

Biotrend continues to work for inclusion in the Borsa Istanbul Sustainability Index and Corporate Governance Index.

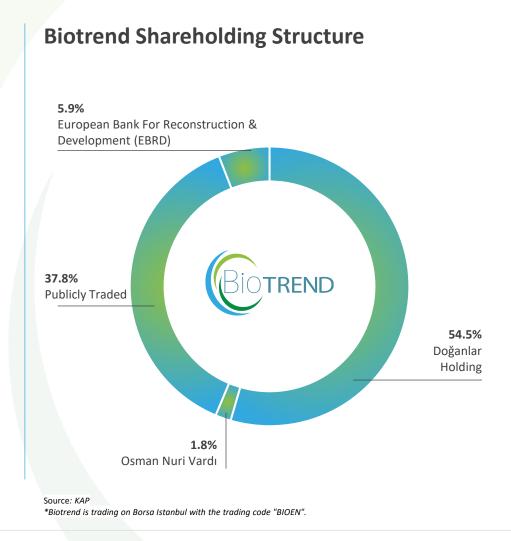
We also established the Sustainability Committee this year under our Board of Directors.





# **Shareholding Structure**

# Strong and Reliable Shareholding Structure



# About Doğanlar Holding A.Ş.

Apart from its activities in the field of energy, DYH also has investments in furniture, construction and retail.

Doğanlar Furniture Group\*







**Doğyap - Construction** 



**Korad - Retail** 





<sup>\*</sup>Doğanlar Mobilya Grubu (Doğtaş Kelebek ) with its old name) is trading on Borsa Istanbul with the trading code "DGNMO".





#### 2022 - Biotrend at a Glance

19

Total Facilities \*

**99.2** MWe

196.671 MWt

**Total Installed Capacity** 

10+ Fields

Waste Disposal

Other existing and planned activities other than energy production\*\*

3.1 million tons

6 million tons

CO<sub>2</sub> Emission Prevention

5 million USD

Carbon Credit Sales

\* \* Together with ongoing investments

\*\* Integrated waste management (Sanitary landfill, fuel production, compost production, mechanical separation and material recovery),carbon trading, integrated energy management (electricity storage, solar electricity generation, heat sales), greenhouse farming, chemical upcycling, and plastic pollution solutions

\*\*\* Cine and Ezine biomass use incentive of 138 USD/MW for the first 5 years

**7** Years

Average remaining YEKDEM term

133 USD/MW and

138 USD/MW\*\*\*

100% of our facilities in production benefit from the old YEKDEM

18 Years

Remaining contract periods with municipalities

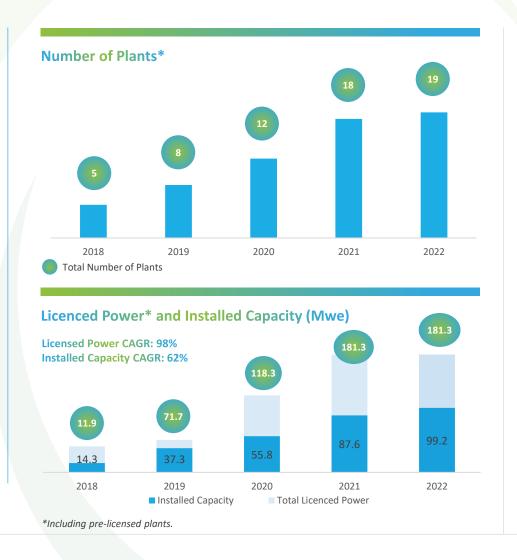


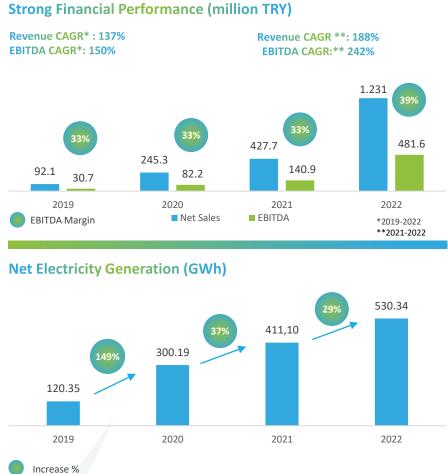




#### **Growth-Oriented Business Model**

As Biotrend, we are aiming to grow by implementing projects with high added value for our country, environment, nature, economy, and the world.









# **Biotrend Facilities**



**87.6** Mwe

2021 Installed Capacity

99.2 Mwe

2022 Installed Capacity

# As of the End of 2022 19\* Facilities



11
Integrated waste
management and BPP\*\*



**6** BPP



Solid fuel preparation



Greenhouse

\* Including facilities with ongoing investments \*\* BPP (Biomass Power Plant)





# **Fields of Operation**

Biotrend is focused on circular economy.

Other existing and planned activities in 10+ fields besides energy generation







# Fields of Operation

Other current and planned operations in Integrated Waste Management, Carbon Trading, Integrated Energy Management, Greenhouse Farming, Chemical Upcycling and Plastic Pollution Solutions

# **Current Operations**



#### **Energy Generation**

**Biogas and Biomass** 

#### **Integrated Waste Management**

Sanitary Landfill
Fuel Production
Compost
Mechanical Separation and
Material Recovery

**Carbon Trading** 

# **Planned Operations**





#### **Integrated Energy Management**

Electricity Storage Solar Electricity Generation Heat Sales

**Greenhouse Farming** 

**Chemical Upcycling** 

**Plastic Pollution Solutions** 





# **Our Strategy and Growth Goals**

# Biotrend is focused on circular economy

#### **Organic Growth in Turkey**

- Ensuring maximum use of available licensed power generation capacity
- Aiming to grow in areas in line with the Company's investment policies and expectations according to the new YEKDEM tariff
- Increasing material recovery rates and refuse -derived fuel production capacity with new investments
- Supporting the cement and plastics industries with environmentally friendly and sustainable raw materials and fuels
- Providing engineering and consultancy services in the fields of activity

#### **Regional Growth**

- Seizing opportunities with strategic global partnerships
- Growing in markets where Doğanlar Holding is currently operating (Balkans, Central Asia, Mediterranean Basin, North Africa and Sub-Saharan Africa)

#### **Inorganic Growth**

Evaluating various acquisition opportunities in Turkey and abroad

#### **Vertical Integration**

- Cyclical raw material sales started at Bergama and Uşak Integrated Waste Management Facility
- Aiming sales at İnegöl Integrated Solid Waste Management facilities
- Within the scope of the Zero Waste Project, evaluating investments in waste collection and recycling facilities
- Sustainable greenhouse farming, heat sales, where the heat generated in energy generation activities within the scope of integrated energy management,
- Making investments in solar power plants with energy storage
- Aiming to diversify carbon trading activities with plastic credits





# **Carbon Credit Projects Overview**

In 2022 1.5 million tons carbon credit sales and 5 million USD in carbon credit revenue.

Every year 2 million carbon credit sales potential

#### **Carbon Credit Projects**

- Carbon Credit Projects started as of 2021 with the Harmandalı, Balıkesir and Uşak facilities.
- Greenhouse gas reduction certification projects covering 16 facilities under Verra, GCC and ICR certification programs are carried out.
- In 2022 years 5 million USD of carbon credit income .
- Nearly 2 million credits per year are expected to reduce emissions.
- In 2022, the Plastic Waste Reduction Program started within the scope of VERRA program.
- Internal carbon pricing mechanism for energy efficiency, green transformation projects, supporting new investments, and effective cost control was activated.



#### **Carbon Credit Projects**

#	SPV	Facility Name	Certification Program
1	Doğu Star	Malatya- 1 Landfill Gas (Orduzu)	
2	Doğu Star	Malatya Unlicensed (Orduzu)	International Carbon Registry
3	Nov Enerji	Sivas Landfill Gas	ICR International Carbon Registry
4	Novtek Enerji	İnegöl Landfill Gas	
5	Novtek Enerji	İskenderun Landfill Gas	
6	İzmir Novtek	İzmir Harmandalı Landfill Gas (İzmir Landfill Gas)	VCS   VERIFIED   Control of Contr
7	İlda (Landfill)	Balıkesir Landfill Gas	VCS   VERIFIED   Caldider   A Galatiflerot reals for Castoni
8	Uşak Yenilenebilir	Uşak Landfill Gas (Uşak Biogas)	VCS VSRIPED Catalway A Galadiser for Catalon A Galadiser for Catalon
9	Doğu Star	İnegöl-2 Biogas	VCS VERIFIED CARDINA A Calculation in Calculation
10	İzmir Doğu Star	İzmir Bergama Landfill Gas	VCS   VERIFIED   Caldidary   Additional   Caldidary   Additional Processing   Caldidary
11	Biyomek Elektrik	Çine Biomass	
12	Yılbatu	Menderes Biogas (İzmir Biogas)	VCS   VERIFIED   Caldident   A Calculation of Calculation   A Calculation of Calculation   Calculati
13	Doğu Star	Malatya- 2 Landfill Gas (Kapıkaya)	VCS CARDON Additional Processing Control Additional Processing Control Additional Processing Control Additional Processing Control Additional Processing Control Additional Processing Control Additional Processing Control
14	MD Biyokütle	Aksaray Landfill Gas	VCS   VERIFIED   Caldide N   Calculate   C
15	Mersin	Ezine Biomass	
16	Serenti	Giresun Landfill Gas	VCS VSRIPED Cattieve N A Gabulifler for the Kir Catton
17	Ayvacık	Ayvacık Landfill Gas	VCS VSRIPED Contribute A Calculation A Calculation for Caston





# **Sustainability Approach**

#### **Sustainability Strategy**

In coordination with the Company strategy, Biotrend has built on alignment with the 2030 and 2050 goals compatible with the green, circular, and digital transformation requirements as per the United Nations 2030 Sustainable Development Goals (SDGs), Paris Agreement and the European Green Deal, which are the triggers of economic and social transformation in the world.

Biotrend creates a technical and social positive impact on our country's sustainable development by working for SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SKA 12: Responsible Production and Consumption; and SDG 13 Climate Action, which are directly related to its activities and which are a priority in its sustainability management.



#### **Accelerating Circular Economy**

**Approach:** With its current projects and investments, Biotrend aims to bring back waste into the economy and to produce high value-added products from waste.

Compliance with International Policies and Frameworks:

Circular Economy Action Plan for a Cleaner and More Competitive Europe

Ellen MacArthur Foundation, New Plastics Economy Global Commitment

United Nations Sustainable Development Goals





#### **Reducing Greenhouse Gas Emissions**

**Approach:** Within the scope of integrated waste management activities, Biotrend aims to prevent greenhouse gas emissions with effective management of municipal, agricultural and forestry wastes and biomass energy activities, and to work for national and international climate targets by including all its projects into carbon credit certificate programs.

**Compliance with International Policies and Frameworks:** 

European Union Green Deal

European Climate Law

European Climate Pact

Strategic Long-Term Vision for a Prosperous, Modern, Competitive and Climate Neutral Economy

2030 Framework for Climate and Energy Policies

Paris Agreement

United Nations Sustainable Development Goals









# Sustainability Approach

# Facilitating the Transition to a Low Carbon Economy with Innovation

**Approach:** Biotrend aims to become the locomotive of low carbon economy by expanding its circular and sustainable raw material, bioelectricity, bioheat, and sustainable fuel portfolio with innovative technology investments and business models.

Compliance with International Policies and Frameworks:

European Union Green Deal

European Commission 2050 Roadmap

European Union Carbon Border Adjustment Mechanism



#### **Protecting Biodiversity**

**Approach:** In 2023, Biotrend will implement biodiversity programs to be carried out jointly with universities and nongovernmental organizations in all its facilities, for the regular control of the impact on biodiversity, one of the most important environmental impact indicators..

#### **Compliance with International Policies and Frameworks:**

European Union 2030 Biodiversity Strategy

**Equator Principles** 

United Nations Convention on Biological Diversity





#### **Respect for Human**

**Approach:** Biotrend is committed to doing business with the principles of inclusiveness, equality, and diversity, and with zero tolerance for occupational and environmental accidents, in a way to cover all its stakeholders throughout the value chain.

**Compliance with International Policies and Frameworks:** 

**United Nations Global Compact** 

**ILO International Labor Standards** 

Universal Declaration of Human Rights

United Nations Sustainable Development Goals











# **Sustainability Management**

CFA Climate Finance Accelerator
Program— UN GC Climate Ambition
Program



We became a signatory of UN Women.

Carbon Credit Projects &
Sustainability Projects
(Plastic Chemical Upcycle Project)







Establisment of Sustainability Office, Establishment of the Sustainability Committee, Efforts to Participate in Borsa İstanbul Sustainability Index and Corporate Governance Index



#### **Social Responsibility Projects**

("Violence Awareness Education for Women Project", "Tree of Life Library Project", Bookshelves for Village Schools Project" and "Gazebo Project",

"Happy Place to Work Award",

"Women Friendly Brands Awareness Award")









# Sustainability – UN GC - Climate Ambition Accelerator Program: 2022-2023 – Climate Finance Accelerator Program 2022



# **Working towards**

European Union's 2050 carbon neutral target Turkey's 2053 net zero target

Under CFA (Climate Finance Accelerator) Program, among apprx.100 projects Biotrend was chosen in top 8 projects as the only waste-to-energy company!









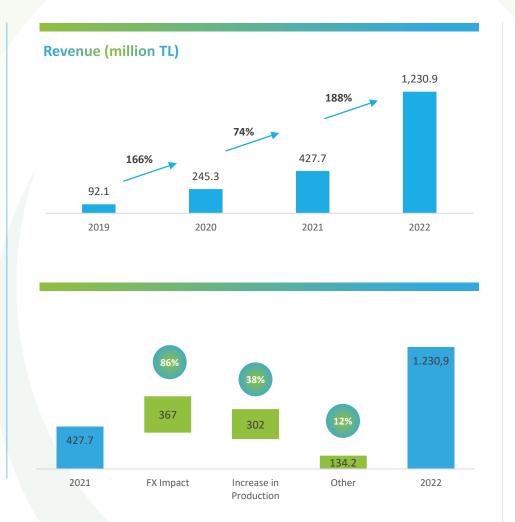


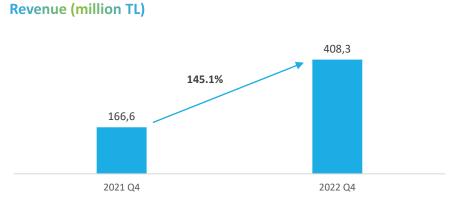


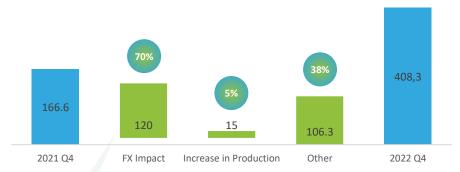
#### Revenue

Installed Capacity increased to 99.2 MWe.

Increase in revenue 2019-2022 LTM 12.4 fold increase with 188% CAGR











20

# **Profitability**

2022 Q4 Gross Profit Margin: 47%

2022 Q4
EBITDA Margin:
54%



\*EBITDA: Gross Profit - Operating Expenses + Depreciation&Amortization Expenses + Landfill Facility Valued by Equity Method (%50)

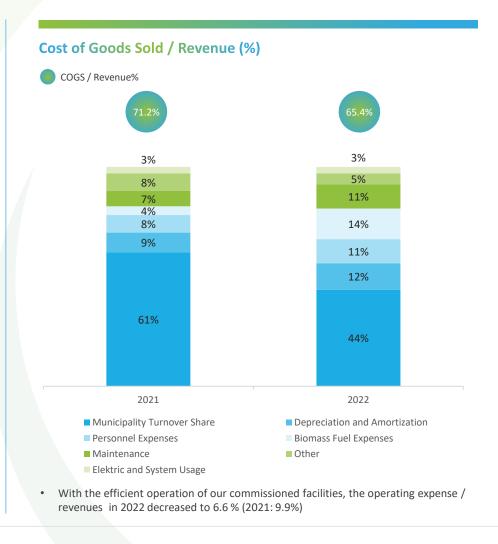
Important Note: The pre-tax figure has been calculated as the shareholding ratio (50%) of Landfill Enerji A.Ş., one of our financial investments valued by the equity method, and is included in EBITDA.

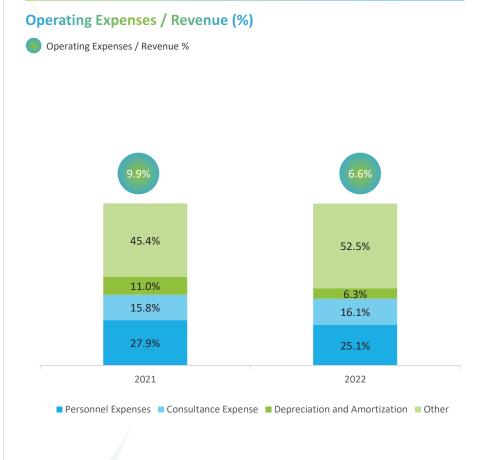




# **COGS& Operating Expenses**

COGS/ Revenue in 2022 decreased to 65%



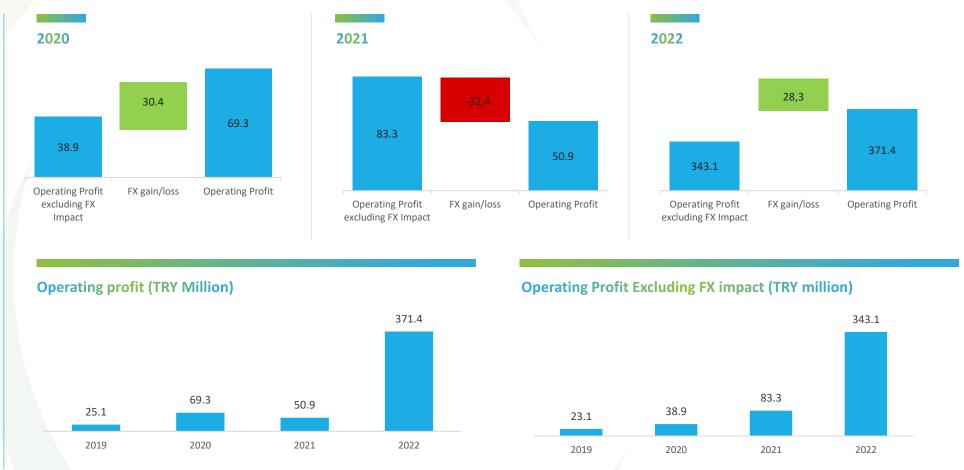






# **Operating Profit (million TRY)**

Operating Profit in 2022 increased to TRY 371.4 million



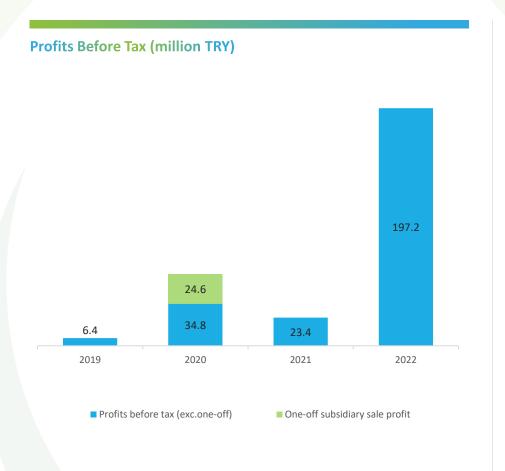
• The company continues to increase its operating profit on a regular basis.

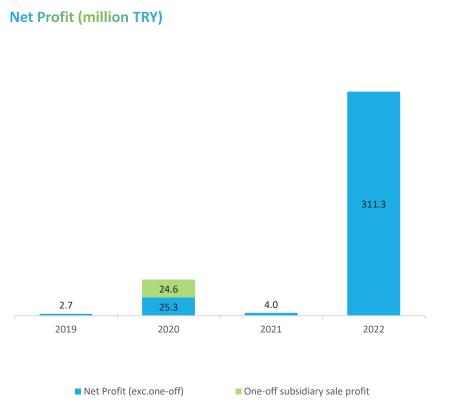




# **Net Profit**

Net Profit increased to TRY 311.3 million





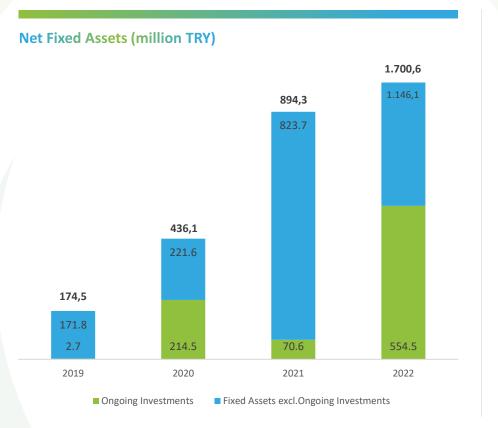


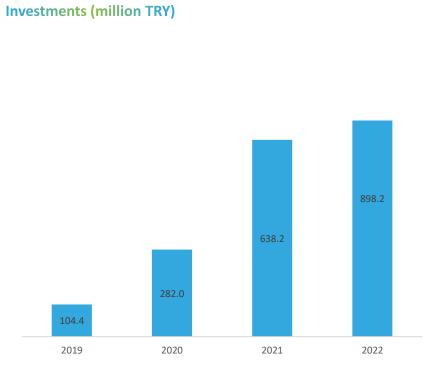


#### **Investments**

# Investments in 2022 increased by 40%

Net Fixed Assets in 2022 increased by 90%





- Foreign currency equivalents of investments 2019: 30.73, 2020: 67.99, 2021: 119.7, 2022: 168.4 million USD
- Investments continue on the planned calendar
- The RoE rate was 49.27% at the end of 2022.



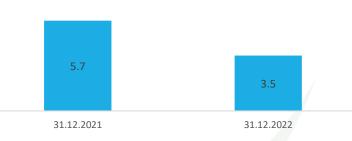


#### **Net Financial Debt**

Net Financial Debt/ EBITDA (x) decreased from 5.7x in 2021 to 3.5x in 2022.











#### 2023 Guidance

1.9 - 2.2 billion TRY

**Total Consolidated Revenues** 

~120 Mwe +1.7 Mwe PV

**Installed Capacity (MWe)** 

~115 Mwe +0.5 Mwe PV

**Average Installed Capacity (MWe)** 

~750-800 thousand MWh

**Gross Electricity Generation (MWh)** 

~650-700 thousand MWh

**Net Electricity Generation (MWh)** 

~%75 - 80

**Electricity Capacity Utilisation Rate** 

2.50x - 3.00x

**Net Financial Debt/EBITDA** 







3. Q&A



4. Annexes

# **Balance Sheet**

Total Assets increased by 75% to TRY 3.207 million.

Million TRY	31.12.2020	31.12.2021	31.12.2022
Cash and Cash Equivalents	101,8	170,9	27,6
Trade Receivables	30,2	104,4	336,4
Stocks	4,4	63,7	116,7
Prepaid expenses	63,9	242,7	547,7
Other	36,6	101,3	139,4
Current Assets	236,9	682,9	1.167,8
Investments Accounted for Using Equity Method	25,3	51,0	85,4
Property, Plant and Equipment	436,1	894,3	1.700,6
Right-of-use assets	37,4	73,9	34,4
Intangible Assets	64,9	61,1	52,0
Other	14,2	68,8	167,5
Fixed Assets	577,9	1.149,1	2.039,9
Total Assets	814,8	1.832,0	3.207,7
Short-Term Borrowings	0,1	0,1	0,0
Short-Term Portions of Long-Term Borrowings	85,7	191,4	444,9
Trade Payables	88,4	217,7	685,0
Other	47,3	64,6	88,6
Short-Term Liabilities	221,5	473,8	1.218,5
Long-Term Borrowings	368,4	778,3	1.276,1
Other	24,9	21,3	5,4
Long-Term Liabilities	393,3	799,6	1.281,4
Paid-in Capital	128,0	500,0	500,0
Premium discounts on shares	-	26,5	26,5
The Effect of Mergers Involving Enterprises or Businesses Under Common Control	-21,9	-21,6	-47,5
Fixed Tangible Assets Revaluation Gains (Losses)	37,8	72,7	71,6
Hedging Gains/Losses	-	-62,9	-206,3
Previous Years Gains/ (Losses)	5,8	40,1	47,0
Net Profit for the Period	50,5	6,5	310,7
Non-controlling Interests	-0,2	-2,7	5,7
Equity	200,0	558,6	707,7
Total Liabilities & Equity	814,8	1.832,0	3.207,7





# **Income Statement**

Fast growth since its establishment...

Million TRY	31.12.2020	31.12.2021	31.12.2022
Revenue	245,30	427,70	1.230,87
Cost of Sales	-177,50	-304,37	-805,00
Gross Profit	67,80	123,34	425,88
General Administrative Expenses	-20,80	-39,91	-78,33
Marketing Expenses	-1,10	-2,56	-3,38
Other Operating Income	67,10	22,23	91,20
Other Operating Expenses	-43,70	-52,22	-64,01
Operating Profit / (Loss)	69,30	50,88	371,35
Income from Investment Activities	26,50	6,40	9,92
Share of Investments' Profit (Loss)	11,10	25,74	34,33
Financial Income	16,30	53,45	106,71
Financial Expenses	-63,70	-113,05	-325,16
Profit / (Loss) Before Tax	59,50	23,42	197,16
Tax Income / (Expense)	-9,50	-19,43	114,14
Net Profit / (Loss) for the Period	49,90	3,99	311,29
EBITDA	82,2	140,9	481,6





#### **Awards**



Bronze Award in the Sustainable Energy category at the EBRD Sustainability Awards 2022



Women-Friendly Brands 2022 Awareness Award



Turkey's Happiest Workplace" Award in the Renewable Energy industry



2021 Sustainable Production and Consumption Association Carbon Hero Award



"Renewable Energy Brand of the Year" award at the Turkey Innovation and Success Awards



Quality of Magazine Best Biomass Energy Award



Energy and Natural Resources Summit Our Energy is Our Future Award



International Environmental Communication Summit Best Public Relations Award





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Gözde Çivici Investor Relations Director & Secretary General

Aysun Vardan Investor Relations Manager



Thank you

